

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A laminated piezoelectric element having a thickness of 100 μ m or less, comprising:
a laminate which comprises having a plurality of piezoelectric ceramic layers; and
electrodes provided at least one of the on a surface and the inside of said the laminate, wherein said the electrodes comprises include a silver-palladium alloy containing 71 to 99.9% by volume of silver and 0.1 to 29% by volume of palladium and the laminated piezoelectric element has a thickness of 100 μ m or less.
2. (Currently amended) The laminated piezoelectric element according to claim 1, wherein said the electrodes comprises include a silver-palladium alloy containing 87% by volume or more silver, and a residual stress remaining inside is 100MPa or less.
3. (Currently amended) The laminated piezoelectric element according to claim 1, wherein said the piezoelectric ceramic layers contains Pb.
4. (Currently amended) The laminated piezoelectric element according to claim 1, wherein said the electrodes contains a piezoelectric ceramic material, and the proportions of the silver-palladium alloy to the piezoelectric ceramic material are in a range from 100: 16 to 60.

5. (Currently amended) The laminated piezoelectric element according to claim 4, wherein said the piezoelectric ceramic material has a mean crystal grain size of 0.9 μm or less.

6. (Original) The laminated piezoelectric element according to claim 1, wherein each piezoelectric ceramic layer is in a range from 1 to 25 μm in thickness.

7. (Currently amended) The laminated piezoelectric element according to claim 1, wherein variations in a d constant is within $\pm 10\%$ across the surface when a voltage is applied between the electrodes.

8. (Currently amended) The laminated piezoelectric element according to claim 1, wherein a bonding strength between said the electrodes and said the piezoelectric ceramic layer is 1.25MPa or higher.

9. (Original) An actuator comprising the laminated piezoelectric element of claim 1.

10. (Currently amended) The actuator according to claim 9, wherein a supporting member is bonded onto the a bottom surface of said the laminated piezoelectric element.

11. (Currently amended) An actuator, comprising:
an oscillator plate;
internal electrodes provided on said the oscillator plate;
a piezoelectric ceramic layer provided on said the internal electrodes;
and
a plurality of surface electrodes provided on said the piezoelectric ceramic layer,

wherein said the oscillator plate, said the internal electrodes, said the piezoelectric ceramic layer and said the surface electrodes comprise include the laminated piezoelectric element of claim 1.

12. (Currently amended) A printing head comprising a flow passage member in which a plurality of ink compressing chambers having ink nozzles are arranged and the actuator of claim 11 mounted on the flow passage member, wherein the ink compressing chambers and said the surface electrodes is are aligned with each other.

13. (New) A method of manufacturing a laminated piezoelectric element, comprising:

forming a laminated having a plurality of piezoelectric ceramic layers; providing electrodes at least on a surface and inside the laminate with the electrodes having a silver-palladium alloy containing 71 to 99 % by volume of silver and 0.1 to 29% by volume of palladium; and

forming the laminated piezoelectric element with a thickness of 100 μm or less.

14. (New) The method of manufacturing according to claim 13, further comprising providing the electrodes with a sliver-palladium alloy containing 87% by volume or more silver and obtaining a remaining residual stress inside of 100 MPa or less.

15. (New) The method of manufacturing according to claim 13, further comprising forming the piezoelectric ceramic layers with 9b.

16. (New) The method of manufacturing according to claim 13, further comprising forming the electrodes with a piezoelectric material and the proportions

of the silver-palladium alloy to the piezoelectric ceramic material are in a range from 100:16 to 60.

17. (New) The method of manufacturing according to claim 16, further comprising providing the piezoelectric ceramic material with a mean crystal grain size of $0.9\mu\text{m}$ or less.

18. (New) The method of manufacturing according to claim 1, further comprising forming each piezoelectric ceramic layer in a range from 1 to $25\mu\text{m}$ in thickness.

19. (New) The method of manufacturing according to claim 1, further comprising applying a voltage between electrodes to obtain variations in a d constant within $\pm 10\%$ across the surface.

20. (New) A piezoelectric element, comprising:
a piezoelectric ceramic layer; and
electrodes provided on both sides of the piezoelectric layer,
wherein the electrodes include a silver-palladium alloy containing 71 to 99.9% by volume of silver and 0.1 to 29% by volume of palladium.